BRUHAT BANGALORE MAHANAGARA PALIKE

Name of work:Construction of RCC Drains and Culverts at Hill Side meadows Sai Nagara in ward No :03, Yelahanka Satellite Town sub Division

JOB NUMBER.:

Sl No.3 Est. Amount = 200.00 Lakhs

Sl No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
1	KSRRB300-1 Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications.								
	KPWD S R 2018-19	lt. No	19.10		Pg No	130			
	New CC Drain								
	HillSide Meadows								
	Ch 00-115 Main Road		2	115.00	1.10	1.00	253.00		
	Ch 00-31 1st cross road right side		2	31.00	1.10	1.00	68.20		
	Ch 00- 152 1st cross road (L- shape)		2	152.00	1.10	1.00	334.40		
	Ch 00 - 93 2nd cross road		2	93.00	1.10	1.00	204.60		
	Ch 00 - 45 3rd cross road		2	45.00	1.10	1.00	99.00		
	Sai Nagar Phase - 1								
	Ch 00 - 132 2nd cross road		2	132.00	1.10	1.00	290.40		
	Ch 00 - 111 3rd cross road		2	111.00	1.10	1.00	244.20		
	Ch 00 - 235 5th cross road		2	235.00	1.10	1.00	517.00		
	Sai Nagar Phase - 3								
	Ch 00 - 134 3rd cross road		1	134.00	1.10	1.00	147.40		
	New Culvert								
	Cross Road	cum	4	7.00	1.50	1.20	50.40		
	New Kerb								
	HillSide Meadows								
	Ch 00-115 Main Road		2	115.00	0.20	0.20	9.20		
	Ch 00-31 1st cross road right side		2	31.00	0.20	0.20	2.48		
	Ch 00- 152 1st cross road (L- shape)		2	152.00	0.20	0.20	12.16		
	Ch 00 - 93 2nd cross road		2	93.00	0.20	0.20	7.44		
	Ch 00 - 45 3rd cross road		2	45.00	0.20	0.20	3.60		
	Sai Nagar Phase - 1								
	Ch 00 - 132 2nd cross road		2	132.00	0.20	0.20	10.56		
	Ch 00 - 111 3rd cross road		2	111.00	0.20	0.20	8.88		
	Ch 00 - 235 5th cross road		2	235.00	0.20	0.20	18.80		
	Sai Nagar Phase - 3								
	Ch 00 - 134 3rd cross road		1	134.00	0.20	0.20	5.36		
						Total Qty	2287.08	211.79	4,84,376.10
2	KSRRB M2900-1 Plain cement concrete M10 mix with crushed stone aggregate 40mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing including cost of materials, labour, HOM complete as per specifications.								
	KPWD S.R 2018-19	lt. No	34.1		Pg No	254			
	New CC Drain								
	HillSide Meadows								
	Ch 00-115 Main Road		2	115.00	1.10	0.15	37.95		
	Ch 00-31 1st cross road right side		2	31.00	1.10	0.15	10.23		
	Ch 00- 152 1st cross road (L- shape)		2	152.00	1.10	0.15	50.16		
	Ch 00 - 93 2nd cross road		2	93.00	1.10	0.15	30.69		
	Ch 00 - 45 3rd cross road		2	45.00	1.10	0.15	14.85		
	Sai Nagar Phase - 1								
	Ch 00 - 132 2nd cross road		2	132.00	1.10	0.15	43.56		
	Ch 00 - 111 3rd cross road		2	111.00	1.10	0.15	36.63		
	Ch 00 - 235 5th cross road		2	235.00	1.10	0.15	77.55		
	Sai Nagar Phase - 3								
	Ch 00 - 134 3rd cross road		1	134.00	1.10	0.15	22.11		
	New Culvert								
	Cross Road	Cum	4	7.00	1.50	0.15	6.30		
	New Kerb								

	Description of Work	Unit	No	Dimension L	B	D	Quantity	Rate in Rs.	Amount in Rs.
	HillSide Meadows								
	Ch 00-115 Main Road		2	115.00	0.20	0.10	4.60		
	Ch 00-31 1st cross road right side		2	31.00	0.20	0.10	1.24		
	Ch 00- 152 1st cross road (L- shape)		2	152.00	0.20	0.10	6.08		
	Ch 00 - 93 2nd cross road		2	93.00	0.20	0.10	3.72		
	Ch 00 - 45 3rd cross road		2	45.00	0.20	0.10	1.80		
	Sai Nagar Phase - 1								
	Ch 00 - 132 2nd cross road		2	132.00	0.20	0.10	5.28		
	Ch 00 - 111 3rd cross road		2	111.00	0.20	0.10	4.44		
	Ch 00 - 235 5th cross road		2	235.00	0.20	0.10	9.40		
	Sai Nagar Phase - 3								
	Ch 00 - 134 3rd cross road		1	134.00	0.20	0.10	2.68		
						Total Qty	369.27	4479.56	16,54,167.12
3	KSRRB M2200-6 Providing TMT Bars Fe 500 steel reinforcement for R C C work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification								
	KPWD S R 2018-19	It. No	28 8 2			Pg No 229			
	One cubic mt 60kg For CC Drain	T	1	38.12			38.12		
	One cubic mt 90kg For Culvert		1	1.31			1.31		
						Total Qty	39.43	72326.98	28,51,852.82
4	Providing and laying plain/reinforced cement concrete for side drains Wall & bottom thickness 15cm using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.60 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500,1700, 2200 including cost of materials, labour, HOM complete as per specifications								
	KPWD S R 2018-19	It. No	37 59 2			Pg No 271			
	CC Drain								
	Bottom Raft								
	HillSide Meadows								
	Ch 00-115 Main Road	Cum	2	115.00	1.00	0.15	34.50		
	Ch 00-31 1st cross road right side		2	31.00	1.00	0.15	9.30		
	Ch 00- 152 1st cross road (L- shape)		2	152.00	1.00	0.15	45.60		
	Ch 00 - 93 2nd cross road		2	93.00	1.00	0.15	27.90		
	Ch 00 - 45 3rd cross road		2	45.00	1.00	0.15	13.50		
	Sai Nagar Phase - 1								
	Ch 00 - 132 2nd cross road		2	132.00	1.00	0.15	39.60		
	Ch 00 - 111 3rd cross road		2	111.00	1.00	0.15	33.30		
	Ch 00 - 235 5th cross road		2	235.00	1.00	0.15	70.50		
	Sai Nagar Phase - 3								
	Ch 00 - 134 3rd cross road		1	134.00	1.00	0.15	20.10		
	Side Wall								
	HillSide Meadows								
	Ch 00-115 Main Road		2 2	115.00	0.15	0.60	41.40		
	Ch 00-31 1st cross road right side		2 2	31.00	0.15	0.60	11.16		
	Ch 00- 152 1st cross road (L- shape)		2 2	152.00	0.15	0.60	54.72		
	Ch 00 - 93 2nd cross road		2 2	93.00	0.15	0.60	33.48		
	Ch 00 - 45 3rd cross road		2 2	45.00	0.15	0.60	16.20		
	Sai Nagar Phase - 1								
	Ch 00 - 132 2nd cross road		2 2	132.00	0.15	0.60	47.52		
	Ch 00 - 111 3rd cross road		2 2	111.00	0.15	0.60	39.96		
	Ch 00 - 235 5th cross road		2 2	235.00	0.15	0.60	84.60		
	Sai Nagar Phase - 3								
	Ch 00 - 134 3rd cross road		1 1	134.00	0.15	0.60	12.06		
	New Culvert								
	Bottom Raft								
	Cross Road		4	7.00	1.20	0.20	6.72		
	Side Wall								
	Cross Road		4 2	7.00	0.20	0.70	7.84		
						Total Qty	649.96	7070.20	45,95,347.19

	Description of Work	Unit	No	Dimension L	B	D	Quantity	Rate in Rs.	Amount in Rs.
	Supplying and fixing precast reinforced concrete slab 10 cm thick of mix M20 using 20mm and downsize graded granite metal using reinforcement 10mm dia steel at 150mm C/c both ways cost, transportation, hire charges of machinery, machine cutting the vertical face to get plain even surface etc , complete with all leads and lift conveyance charges, labour charges inclusive of cost of cost of all materials(data Rate enclosed)								
	Approval Rate								
	Cover Slab								
	HillSide Meadows								
	Ch 00-115 Main Road		2	115.00	0.90		207.00		
	Ch 00-31 1st cross road right side		2	31.00	0.90		55.80		
	Ch 00- 152 1st cross road (L- shape)		2	152.00	0.90		273.60		
	Ch 00 - 93 2nd cross road		2	93.00	0.90		167.40		
	Ch 00 - 45 3rd cross road		2	45.00	0.90		81.00		
	Sai Nagar Phase - 1	Sqm							
	Ch 00 - 132 2nd cross road		2	132.00	0.90		237.60		
	Ch 00 - 111 3rd cross road		2	111.00	0.90		199.80		
	Ch 00 - 235 5th cross road		2	235.00	0.90		423.00		
	Sai Nagar Phase - 3								
	Ch 00 - 134 3rd cross road		1	135.00	0.60		81.00		
						Total Qty	1726.20	2337.00	40,34,129.40
6	Providing and laying Pre Cast Drain Cover slabs of 250mm thick of mix M20 using graded granite jelly 20mm down size with steel reinforcement, including from work, lift charges, curing and concrete finished surfaces on both side etc complete and as per drawing and direction of Engineer-in-charge of work (data Rate enclosed)								
	Approval Rate								
	Cover Slab								
	Cross Road	Sqm	4	7.00	1.50		42.00		
						Total Qty	42.00	5418.00	2,27,556.00
7	Providing and fixing Pre cast solid concrete kerb stones of size 450 x 200 x 400 mm made out of CC 1 2 4 and finished with CM 1 3 plastering and finishing cutting etc , complete								
	KPWD S R 2018-19	It. No		5.29.2	Pg No	27			
	New Kerb								
	HillSide Meadows								
	Ch 00-115 Main Road		2	256.00			512.00		
	Ch 00-31 1st cross road right side		2	69.00			138.00		
	Ch 00- 152 1st cross road (L- shape)		2	338.00			676.00		
	Ch 00 - 93 2nd cross road		2	207.00			414.00		
	Ch 00 - 45 3rd cross road	Nos	2	100.00			200.00		
	Sai Nagar Phase - 1								
	Ch 00 - 132 2nd cross road		2	258.00			516.00		
	Ch 00 - 111 3rd cross road		2	222.00			444.00		
	Ch 00 - 235 5th cross road		2	422.00			844.00		
	Sai Nagar Phase - 3								
	Ch 00 - 134 3rd cross road		1	297.00			297.00		
						Total Qty	4041.00	477.00	19,27,557.00
8	KSRRB 800-1 Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications								
	KPWD S R 2018-19	It. No		24.1	Pg No	180			
	New Kerb								
	HillSide Meadows								
	Ch 00-115 Main Road		2	114.00		0.50	114.00		
	Ch 00-31 1st cross road right side		2	30.00		0.50	30.00		
	Ch 00- 152 1st cross road (L- shape)		2	152.00		0.50	152.00		
	Ch 00 - 93 2nd cross road		2	93.00		0.50	93.00		
	Ch 00 - 45 3rd cross road	Sqm	2	40.01		0.50	40.01		
	Sai Nagar Phase - 1								
	Ch 00 - 132 2nd cross road		2	132.00		0.50	132.00		
	Ch 00 - 111 3rd cross road		2	111.00		0.50	111.00		
	Ch 00 - 235 5th cross road		2	235.00		0.50	235.00		
	Sai Nagar Phase - 3								
	Ch 00 - 134 3rd cross road		1	134.00		0.50	67.00		
						Total Qty	974.01	84.80	82,596.05

	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications.								
	KPWD S R 2018-19	lt. No	19.14		Pg No	143			
	Earth Work for BWSSB cut Protion								
	Sai Nagara-1								
	Ch 00 - 140 2nd cross road	Cum	1	140.00	1.00	0.35	49.00		
	Ch 00 - 140 3rd cross road		1	140.00	1.00	0.35	49.00		
	Pot holes		36	1.20	1.50	0.35	22.68		
	Road Across Cutting		36	7.00	0.30	0.35	26.46		
						Total Qty	**147.14**	**57.03**	**8,391.10**
10	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregatesof granite/trap/basalt material, mixing by mix in place method by rotavator at OMC, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications.								
	KPWD S R 2018-19	lt. No	20.60		Pg No	153			
	Earth Work for BWSSB cut Protion								
	Ch 00 - 140 2nd cross road	Cum	1	140.00	1.00	0.15	21.00		
	Ch 00 - 140 3rd cross road		1	140.00	1.00	0.15	21.00		
	Pot holes		36	1.20	1.50	0.15	9.72		
	Road Across Cutting		36	7.00	0.30	0.15	11.34		
						Total Qty	**63.06**	**1855.00**	**1,16,976.30**
11	KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications.								
	KPWD S R 2018-19	lt. No	20.18		Pg No	155			
	Earth Work for BWSSB cut Protion								
	Ch 00 - 140 2nd cross road	Cum	1	140.00	1.00	0.20	28.00		
	Ch 00 - 140 3rd cross road		1	140.00	1.00	0.20	28.00		
	Pot holes		36	1.20	1.50	0.20	12.96		
	Road Across Cutting		36	7.00	0.30	0.20	15.12		
						Total Qty	**84.08**	**2001.28**	**1,68,267.62**
12	KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour. HOM complete as per specifications.								
	KPWD S R 2018-19	lt. No	19.64		Pg No	147			
	Earth Work for BWSSB cut Protion								
	Ch 00 - 140 2nd cross road	Sqm	1	140.00	1.00		140.00		
	Ch 00 - 140 3rd cross road		1	140.00	1.00		140.00		
	Pot holes		36	1.20	1.50		64.80		
	Road Across Cutting		36	7.00	0.30		75.60		
						Total Qty	**420.40**	**6.36**	**2,673.74**
13	KSRRB M500-6. Providing and applying primer coat with S S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications.								
	KPWD S R 2018-19	lt. No	21.6		Pg No	158			
	Earth Work for BWSSB cut Protion								
	Ch 00 - 140 2nd cross road	Sqm	1	140.00	1.00		140.00		
	Ch 00 - 140 3rd cross road		1	140.00	1.00		140.00		
	Pot holes		36	1.20	1.50		64.80		
	Road Across Cutting		36	7.00	0.30		75.60		
						Total Qty	**420.40**	**33.92**	**14,259.97**
14	KSRRB 500-2. Cleaning the existing black topped surface with Sqm brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM complete as per specifications. Clause 501 of MORTH V revision.								
	KPWD S R 2018-19	lt. No	21.2		Pg No	158			
	Full Width								
	Ch 00 - 140 2nd cross road	Cum	1	140.00	6.50		910.00		
	Ch 00 - 140 3rd cross road		1	140.00	6.50		910.00		

Description of Work	Unit	No	Dimension L	B	D	Quantity	Rate in Rs.	Amount in Rs.
					Total Qty	1820.00	5.30	9,646.00

KSRRB 500-11 Providing and laying bituminous macadam using 40/60 TPH capacity H.M.P with Mechanical paver Gr-II (50 mm to 75 mm) with 3.4% VG-30 Bitumenon prepared surface with crushed coarse aggregates as per design mix formula for base / binding course including loading of aggregates with F.E. loader, hot mixing of stone aggregates and bitumen in hot mix plant, transporting the mixed material in tipper to paver and laying mixed materials with paver finisher to the required level and grade, rolling by smooth wheeled, vibratory & tandem rollers to achieve the desired density, but excluding cost of primer / tack coat & including lead, lift and cost of all materials, labour, HOM complete as per specifications.
Clause 504 of MORTH V revision

KPWD S R 2018-19	It. No	21.11.6			Pg No	159			
Earth Work for BWSSB cut Protion									
Ch.00 - 140 2nd cross road									
Ch.00 - 140 3rd cross road	Cum	1		140.00	1.00	0.05	7.00		
Pot holes		1		140.00	1.00	0.05	7.00		
Road Across Cutting		36		1.20	1.50	0.05	3.24		
BM for Profile correction		36		7.00	0.30	0.05	3.78		
		1		952.00	0.15	0.05	7.14		
						Total Qty	28.16	5962.50	1,67,904.00

16 KSRRB 500-7 Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications

KPWD S R 2018-19	It. No	21.7			Pg No	159			
BC Road									
Ch.00 - 140 2nd cross road	Sqm	1		140.00	6.50		910.00		
Ch.00 - 140 3rd cross road		1		140.00	6.50		910.00		
						Total Qty	1820.00	12.72	23,150.40

17 Providing and laying bituminous concrete 40mm thick with hot mix plant, using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminous binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) crushed aggregates of specified grading premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015

KPWD S R 2018-19	It. No	21.[illegible]			Pg No	162			
BC Road									
Ch.00 - 140 2nd cross road	Cum	1		140.00	6.50	0.03	27.30		
Ch.00 - 140 3rd cross road		1		140.00	6.50	0.03	27.30		
						Total Qty	54.60	8699.42	4,74,988.33

18 KSRRB M800-13 Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area. thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC 35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications

KPWD S R 2018-19	It. No	24.15				Pg No	182			
Edge lane										
Road Both Side	Sqm	1	2	243.00		0.15		72.90		
Road Centre		1	1	122.00		0.10		12.20		
							Total Qty	85.10	454.74	38,698.37

19 Direction and Place Identification Signs with size more than 0.9 Size Board: Providing and erecting direction and place identification retro -reflectorised sign as per IRC 67 made of high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting 2 mm thick with area not exceeding 0.9 sqm supported on a mild steel single angle iron post 75 x 75 x 6 mm , 2 Nos. firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete 45 x 45 x 60 cm, 60 cm below ground level as per approved drawing

KPWD S R 2018-19	It. No	24.4			Pg No	180			
Edge lane									
Road Both Side	sqm	2		0.90	0.90		1.62	7557.80	12,243.64
							Total Construtuion cost		168,94,781.15
							GST 12%		20,27,373.74
							Design Report,Proof Checking & PMC Amount		4,00,000.00
							KRIDL Charges 4%		6,75,791.25

Construction of RCC Drains and Culverts at Hill Side meadows Sai Nagara in ward No.:03, Yelahanka Satellite Town sub Division

Detailed Estimate

Description of Work	Unit	No	Dimension			Quantity	Rate	Amount
			L	B	D		in Rs.	in Rs.
							Sub Total	199,97,930.94
							Miscellaneous & Rounding Off	2,069.06
							Grand Total	200,00,000.00

Certificate :-

1. The workspot was inspected and work is found to be necessary
2. The area comes within the Bruhat Bangalore Mahanagara Palike Limits.
3. The rates adopted based on the PWD SR Bangalore Circle for year 2018-19
4. The provisions made in the estimate are necessary and essential.

SHREE SAI CONSULTANTS BANGALORE-59

Consultant
For Sri Sai Consultants

Assistant Engineer
Ward no. 03
BBMP - Bangalore

Assistant Executive Engineer
Yelahanka Sub Division
BBMP - Bangalore

Executive Engineer
Yelahanka Division
BBMP - Bangalore

Administrative Sanction for Rs. Two Lakhs
Two Lakhs only
is accorded under head P-3749
Gen - Nallanagarathana BE village
grants
Subject
to cond
No EE/YNK/82/2019-20

Technical Sanction accorded
Agreement No.
Cost No. 193 dt. 8.11.2019
SAO (YNK)